Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte DANIEL B. ROITMAN, SEIJI INAOKA,
and RIOGOBERTO C. ADVINCULA

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Appeal No. 2002-1698
Application No. 09/401,691

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ON BRIEF

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Before GARRIS, WARREN, and WALTZ, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 12 and 13. The only other claims remaining in the application, which are claims 1-11, stand withdrawn from further consideration by the examiner.

The subject matter on appeal relates to a display device comprising a plurality of pixels wherein a first one of said

pixels comprises a first electrode, a layer of a first electroluminescent material, and a second electrode, the layer of said first electroluminescent material comprising a first polymer that emits light in response to holes and electrons combining therein. The polymer comprises a first precursor polymer comprising a plurality of electrochemical polymerizable monomers which have first and second polymer-forming active sites (that can be joined by electrochemical polymerization) and third and fourth polymer-forming active sites (that can be joined chemically in solution), wherein said first precursor polymer comprises said monomers joined by the third and fourth polymer-forming active sites, and wherein the first polymer comprises at least two of the first precursor polymers linked by the first and second polymer-forming active sites on monomers in the first precursor polymers. Further details of this appealed subject matter are set forth in representative independent claim 12 which reads as follows:

12. A display device comprising a plurality of pixels, wherein

a first one of said pixels comprises a first electrode, a layer of a first electroluminescent material, and a second electrode, said layer of said first electroluminescent material comprising a first polymer that emits light in response to holes and electrons combining therein, said polymer comprising a first precursor polymer comprising a plurality of electrochemical polymerizable monomers, each monomer having first and second

polymer-forming active sites that can be joined by electrochemical polymerization and third and fourth polymer-forming active sites that can be joined chemically in solution, said first precursor polymer being soluble in a first solvent whereas a polymer formed by electrochemical polymerization of said first and second polymer-forming active sites is insoluble in said first solvent, wherein said first precursor polymer comprises said monomers joined by said third and fourth polymer-forming active sites, said first polymer comprising at least two of said first precursor polymers linked by said first and second polymer-forming active sites on monomers in those first precursor polymers.

The references relied upon by the examiner in the section 102 and section 103 rejections before us are:

Leising et al. (Leising)	5,949,188	Sep. 7, 1999
Andersson et al. (Andersson)	6,117,567	Sep. 12, 2000 (filed May 16, 1995)

Claims 12 and 13 stand rejected under the second paragraph of 35 U.S.C. § 112 for failing to particularly point out and distinctly claim the subject matter which the appellants regard as their invention.

Claim 12 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Leising.

Finally, claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Leising in view of Andersson.

We refer to the brief and reply brief and to the answer for a complete exposition of the contrary viewpoints expressed by the appellants and by the examiner concerning the above noted rejections.

OPINION

We cannot sustain any of these rejections.

With respect to the section 112 rejection, the examiner has enumerated several criticisms of the appealed claim language which are believed by the examiner to render the claims indefinite. However, for the reasons fully detailed by the appellants on pages 7-9 of the brief and pages 3-4 of the reply brief, the examiner's belief is simply not well founded. When the language of the claims is analyzed, as it must be, in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing an ordinary level of skill in the pertinent art, it is apparent that the appealed claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity in accordance with the second paragraph of 35 U.S.C. § 112. See In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971).

Under these circumstances, we cannot sustain the examiner's section 112, second paragraph, rejection of claims 12 and 13.

As for the section 102 rejection, we share the appellants' fundamental position that Leising fails to disclose, either expressly or inherently, the appealed independent claim 12

requirement for "said first polymer comprising at least two of said first precursor polymers linked by said first and second polymer-forming active sites on monomers in those first precursor polymers." It may be true, as urged by the examiner, that the electroluminescent polymers of Leising comprise monomers which are structurally similar to the monomers of the appellants. Nevertheless, Leising's disclosure is fatally deficient with respect to whether the active sites of his monomers possess the capabilities required by claim 12 and more particularly with respect to whether his polymers comprise at least two precursor polymers linked by first and second polymer-forming active sites of the type here claimed.

It appears to be the examiner's view that the appellants' claimed features involving the recited first, second, third and fourth polymer-forming active sites are satisfied merely by the presence of four active sites on the monomers from which patentee's electroluminescent polymers are made. In this regard, the examiner acknowledges that "Leising does not specify how the polymer is made either through electrochemical polymerization or joined chemically" but nevertheless argues that, "since Leising teaches the same polymer as claimed, the patentability of a product does not depend on its method of production" (answer,

page 5). The examiner's aforenoted viewpoint and concomitant argument are misplaced.

The claim 12 recitation of active sites "that can be joined by electrochemical polymerization" and "that can be joined chemically in solution" defines, not a method of production as the examiner believes (i.e., according to the examiner, "[t]he claim clearly includes the process limitation 'that can be joined'"; answer, page 5) but rather, a characteristic of these sites, namely, their capability of being joined by specified chemical mechanisms. At a minimum, the active sites of Leising must likewise possess this capability and his polymer must comprise at least two precursor polymers linked by first and second active sites having the requisite capability associated therewith. As the examiner seems to appreciate, the Leising reference contains no disclosure of active sites that possess the characteristics or capabilities under consideration.

It is well settled that a chemical compound and its properties are inseparable. In re Papesch, 315 F.2d 381, 391, 137 USPQ 43, 51 (CCPA 1963). In claim 12, the properties of the monomers and polymers made therefrom are defined, in part, by the capability of the monomer active sites to be joined by electrochemical polymerization and to be joined chemically in

solution. Because these properties or capabilities are inseparable from the monomers and polymers defined by the claim under review, they cannot be ignored or dismissed as the examiner has done.

Under the circumstances recounted above, we also cannot sustain the examiner's section 102 rejection of claim 12 as being anticipated by Leising.

The section 103 rejection of claim 13 over Leising in view of Andersson likewise cannot be sustained. We do not find and the examiner does not contend that Andersson supplies the above discussed deficiencies of Leising. Therefore, even if these references were combined in the manner proposed by the examiner, the resulting display device would not include polymers of the type required by here rejected dependent claim 13 and by parent claim 12 for the reasons previously discussed.

The decision of the examiner is reversed.

REVERSED

Bradley R. Garris Administrative Patent Judge	)	
Charles F. Warren Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
Thomas A. Waltz Administrative Patent Judge	)	

BRG:tdl

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